

ABSTRACT OF THE DISCLOSURE

An ATM switching system 1 is provided with an ATM switch 11, a reserved connection memory 12 for storing reserved connection information, a call history memory 13 for maintaining call histories of requests for connection from subscriber's terminal units 2₁ to 2_n, and a call-signal processing section 15. The call-signal processing section 15 generates a request for connection with respect to a trunk ATM switching network 3 by the use of the call histories in the call history memory 13 in the case where no call was issued from the subscriber's terminal units, and stores response results thereof in the reserved connection memory 16. Thereafter, when there was a call from the subscriber's terminal units 2₁ to 2_n and contents of the request for connection thereof are the same as the reserved connection information, which has been stored in the reserved connection memory 16, processing for connection is executed by the use of the reserved connection information. As a result, an ATM switching system by which response becomes possible in even the case where a large amount of calls are issued at the same time, besides reduction in cost can also be attained is provided.